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EXAMINER

CHUNG, JASON

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,908	<b>Applicant(s)</b> JUNEAU, J. RENE	
	<b>Examiner</b> JASON CHUNG	<b>Art Unit</b> 2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 37-55 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 37-55 defines a "system". However, while the preamble defines a "system", which would typically be indicative of an "apparatus", the body of the claim lacks definite structure indicative of a physical apparatus. Furthermore, the specification indicates that the invention may be embodied as pure software, see paragraphs [0076, 0116, 0170] of the specification. Therefore,

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the claim as a whole appears to be nothing more than a “system” of software elements, thus defining functional descriptive material per se.

Functional descriptive material may be statutory if it resides on a “computer-readable medium or computer-readable memory”. The claim(s) indicated above lack structure, and do not define a computer readable medium and are thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program.

The examiner suggests adding structure to the body of the claim that would clearly define a statutory apparatus. Any amendment to the claim should be commensurate with its corresponding disclosure.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk (2002/0092015) in view of Wehmeyer (5,867,226).

Regarding claim 1, Sprunk discloses a method for detecting unauthorized signal usage in a content delivery network (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract), comprising the steps of: acquiring signal usage records for a receiver of said content (checkpoints are encountered when objects are displayed on a screen, and objects include video: paragraphs [0032, 0035, 0042, 0048]; abstract); evaluating signal usage records for indicia of usage of a combination of signals not normally authorized on said receiver (ACP 240 determines if authentication and/or authorization were performed in response to checkpoint: paragraph [0104]; Figure 15b; abstract); and detecting unauthorized signal usage upon said signal usage records being consistent with said indicia (if test failed: paragraph [0104]).

Sprunk is silent as to the security report having at least two signal usage records.

Wehmeyer discloses at least two signal usage records (2 or more counts displayed for accurately predicting usage in a log that tracks user viewing: column 2, lines 33-56; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk by having at least two signal usage records as taught by Wehmeyer in order to have a larger sample size to make more accurate predictions.

Regarding claim 4, Sprunk in view of Wehmeyer discloses the method according to of claims 1, further comprising disabling said receiver upon detecting unauthorized

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signal usage at said receiver (disable the set top box if no report is received: paragraphs [0101-0102]).

Regarding claim 37, Sprunk discloses a system for detecting unauthorized signal usage in a content delivery network, comprising: a record acquisition module for acquiring signal usage records for a receiver of said content (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract); a data set of indicia of usage of a combination of signals not normally authorized on said receiver (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract); and an evaluation module for evaluating said signal usage records against said indicia, wherein unauthorized signal usage is detected upon said signal usage records being consistent with said indicia (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract).

Sprunk is silent as to the report having two signal usage records.

Wehmeyer discloses at least two signal usage records (2 or more counts displayed for accurately predicting usage in a log that tracks user viewing: column 2, lines 33-56; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk by having at least two signal usage records as taught by Wehmeyer in order to have a larger sample size to make more accurate predictions.

Regarding claim 38, Sprunk in view of Wehmeyer discloses the system for controlling unauthorized signal usage of claim 37, further comprising a disabling module for disabling said receiver upon detecting unauthorized signal usage at said receiver (Sprunk: disabling set top box: paragraphs [0101-0102]).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Williams (2004/0123329).

Regarding claim 2, Sprunk in view of Wehmeyer discloses the method according to claim 1, wherein said indicia include use at said receiver of at least two signals (Wehmeyer: two usage signals in log).

Sprunk in view of Wehmeyer is silent as to each of which is only normally authorized for use in mutually distinct geographic locations.

Williams discloses signals each of which is only normally authorized for use in mutually distinct geographic locations (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of

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Wehmeyer by having signals only normally authorized for use in mutually distinct geographic locations as taught by Williams in order to determine if a hacker is trying to access multiple regions.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Williams in further view of Tsuria (WO 02/054765).

Regarding claim 3, Sprunk in view of Wehmeyer discloses the method according to claims 1, wherein usage of each said at least two signals (Wehmeyer: two signals)

Sprunk in view of Wehmeyer is silent as to geographic region authorization. Williams discloses geographic region authorization (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer by having geographic region authorization as taught by Williams in order to detect any possible hackers that are trying to obtain content from another region.

Sprunk in view of Wehmeyer in further view of Williams is silent as to is associated with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any one of said at least two signals by reference to its respective blackout region is exclusive from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals.



Tsuria discloses is associated with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any one of said at least two signals by reference to its respective blackout region is exclusive from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals (blackout receivers within the blackout region and permitting viewers outside the region to watch the programming: page 8, line 17-page 9, line 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Williams by being associated with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any one of said at least two signals by reference to its respective blackout region is exclusive from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals as taught by Tsuria in order to blackout content for a live sporting event if a viewer lives within a certain region.

Claims 5, 9, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks (2002/0104083).

Regarding claim 5, Sprunk in view of Wehmeyer discloses the method according to claim 4, wherein at least one of the steps of acquiring at least two signal usage records (Wehmeyer: two signal usages), evaluating said at least two usage signal records (Sprunk: security checks performed by the set top box are reported back to the

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headend and security reports about objects such as when video is displayed is reported back to the headend: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract), detecting unauthorized signal usage (Sprunk: security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract) and disabling said receiver (Sprunk: disabling: paragraphs [0101-0102])

Sprunk in view of Wehmeyer is silent as to being performed at a different time than in immediate succession to each other of the said steps.

Hendricks discloses performed at a different time than in immediate succession to each other of the said steps (the system polls the receiver and the receiver sends monthly reports as to what the viewer watched, rather than sending a report up in immediate succession after watching a program and having the report evaluated on a monthly basis, instead of evaluating in immediate succession after viewing the program: paragraphs [0017, 0121]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer by having functions performed at a different time than in immediate succession to each other of the said steps as taught by Hendricks in order to save upstream network bandwidth by sending data only monthly.

Regarding claim 9, Sprunk in view of Wehmeyer in further view of Hendricks discloses the method according to claim 5, wherein said receiver is associated with an

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interactive television system (Wehmeyer: users interacting with user interface to tune to programs: column 5, lines 7-30; Figures 6A-6C).

Regarding claim 39, Sprunk in view of Wehmeyer is silent as to the system for controlling unauthorized signal usage of claim 38, wherein said record acquisition module, evaluation module and disabling module each executes at a different time than in immediate succession to each other.

Hendricks discloses the system for controlling unauthorized signal usage of claim 38, wherein said record acquisition module, evaluation module and disabling module each executes at a different time than in immediate succession to each other (the system polls the receiver and the receiver sends monthly reports as to what the viewer watched, rather than sending a report up in immediate succession after watching a program and having the report evaluated on a monthly basis, instead of evaluating in immediate succession after viewing the program: paragraphs [0017, 0121]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer to have said record acquisition module, evaluation module and disabling module each executes at a different time than in immediate succession to each other as taught by Hendricks in order to save upstream network bandwidth by sending information monthly, rather than at all times.

Regarding claim 40, Sprunk in view of Wehmeyer in further view of Hendricks discloses the system for controlling unauthorized signal usage of claim 39, wherein said record acquisition module, data set of indicia, evaluation module, and disabling module

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are associated with at least one network element in said content delivery network (Sprunk: all associated with the set top box 200, which is a network element and has an access control processor 240: Figure 2; paragraphs [0052, 0099-0118]).

Claims 6-8, 41, 50, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek (6,009,116).

Regarding claim 6, Sprunk in view of Wehmeyer in further view of Hendricks discloses the method according to claim 5, wherein the steps of acquiring at least two signal usage records (Wehmeyer: two usages), evaluating said at least two usage records (Sprunk: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract), detecting unauthorized signal usage and disabling said receiver (Sprunk: paragraphs [0099-0118]).

Sprunk in view of Wehmeyer in further view of Hendricks is silent as to disabling said receiver is performed by said receiver. Bednarek discloses disabling said receiver is performed by said receiver (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks by disabling said receiver is performed by said receiver as taught by Bednarek in order to have an authorization mechanism built into the receiver in case the headend fails to notice the viewer is not properly authorized.

Regarding claim 7, Sprunk in view of Wehmeyer in further view of Hendricks is silent as to the method according to claim 5, the steps of acquiring at least two signal usage records (Wehmeyer: two signal usages), evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver (Sprunk: disabling).

Sprunk in view of Wehmeyer in further view of Hendricks is silent as to conditional access.

Bednarek discloses the method according to claim 5, wherein said content delivery network includes a conditional access system in communication with said receiver, and the steps of acquiring signal usage records, evaluating said signal usage records, detecting unauthorized signal usage and disabling said receiver are performed by said conditional access system (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks by having a conditional access system as taught by Bednarek in order to control the programming content that is viewed.

Regarding claim 8, Sprunk in view of Wehmeyer in further view of Hendricks discloses the method according to claim 5, wherein said content delivery network includes said receiver and said receiver performs at least one of the steps of acquiring at least two signal usage records (Wehmeyer: two signal usage records), evaluating

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said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver (Sprunk: disabling: paragraphs [0101-0102]).

Sprunk in view of Wehmeyer in further view of Hendricks is silent as to the conditional access system performs a said step other than the said at least one of the steps.

Bednarek discloses the conditional access system performs a said step other than the said at least one of the steps (blocking or not blocking content based on a determination the GPS positioning of the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks by having a conditional access system performing a set other than the said at least one of the steps as taught by Bednarek in order to determine the geographic region of the set top box.

Regarding claim 41, Sprunk in view of Wehmeyer in further view of Hendricks is silent as to the system for controlling unauthorized signal usage of claim 40, wherein one of said at least one network element is any one of said receiver, an advertising management system, a blackout control system, a conditional access system, a multiplexer and a parental control system.

Bednarek discloses the system for controlling unauthorized signal usage of claim 40, wherein one of said at least one network element is any one of said receiver, an advertising management system, a blackout control system, a conditional access system (Bednarek: set top box with GPS and conditional accesser identifies the region

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of content that the viewer should receive, the GPS in combination with conditional access device disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), a multiplexer and a parental control system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks by having an advertising management system, a blackout control system, a conditional access system as taught by Bednarek in order to control access of the viewer of the set top box based on where they are located.

Regarding claim 50, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek discloses the system for controlling unauthorized signal usage of claim 41, wherein said acquisition module further acquires a geographic indicia for said receiver to identify a geographic location associated with said receiver (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional access device disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), and said indicia include indicia of usage of a signal not normally authorized (Sprunk: not normally authorized: paragraphs [0099-0117]) for usage in the geographic location (Bednarek: geographic location) of said receiver.

Regarding claim 53, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek discloses the system for controlling unauthorized signal usage of claim 50, wherein said geographic indicia comprise data associated with a global positioning system (Bednarek: set top box with GPS and conditional accesser identifies

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the region of content that the viewer should receive, the GPS in combination with conditional access device disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Williams in further view of Bednarek (6,009,116).

Regarding claim 10, Sprunk in view of Wehmeyer in further view of Williams discloses the method according to of claims 2, wherein the said steps of evaluating said at least two signal usage records (Sprunk: two signal usages in log) and detecting unauthorized signal usage.

Sprunk in view of Wehmeyer in further view of Williams is silent as to performed by at least one of said receiver, an advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network.

Bednarek discloses performed by a conditional access system (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive: column 5, lines 25-65; column 6, lines 50-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Williams by being performed by at least one of said receiver, an advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network as taught by Bednarek in order to identify the proper regional content the viewer should receive.



Claims 11-12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki.

Regarding claim 11, although Sprunk in view of Wehmeyer discloses two signal usage records (Wehmeyer: two signal usages), Sprunk in view of Wehmeyer is silent as to the method according to claim 1, wherein said indicia include indicia of concurrent usage of pay-per-usage signals.

Bennett discloses the method according to claim 1, wherein said indicia include indicia of usage of pay-per-usage signals (the viewing history checks for inconsistencies involved in authentication of the PPV: column 11, lines 11-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer by having the indicia include indicial of usage of pay-per-usage signals as taught by Bennett in order to detect any unauthorized use of pay-per-view channels.

Sprunk in view of Wehmeyer in further view of Bennett is silent as to concurrent usage. Suzuki discloses concurrent usage (continuously pressing the channel change button tunes to two or more channels to quickly tune to channels: paragraphs [0028-0034]; Figure 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett by concurrent usage as taught by Suzuki in order to quickly surf through channels.

Regarding claim 12, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki discloses the method according to claim 11, wherein said indicia

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of concurrent usage of two or more pay-per-usage signals (Suzuki: continuously pressing the channel change button tunes to two or more channels to quickly tune to channels: paragraphs [0028-0034]; Figure 4; Bennett: pay per view) include indicia of usage of said two or more pay-per-usage signals within a predetermined period of time (Suzuki: the continuous pressing that quickly tunes is within a predetermined period of time).

Regarding claim 17, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki discloses the method according to of claims 11, further comprising disabling said receiver in said content delivery network upon detecting unauthorized signal usage at said receiver (Sprunk: disabling set top box: paragraphs [0101-0102]).

Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Chaney (6,035,037).

Regarding claim 13, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki discloses the method according to claim 11, wherein said indicia of concurrent (Suzuki: concurrent) usage of said two or more pay-per-usage signals (Bennett: PPV).

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki is silent as to include indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals.

Chaney discloses include indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals (having picture in picture for pay TV systems involves detecting if the viewer has proper authorization to receive multiple programs: abstract; column 2, line 32-column 3, line 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki by including indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals as taught by Chaney in order to determine if the viewer has properly decrypted the signals.

Regarding claim 15, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki discloses the method according to claim 11, wherein said indicia of concurrent usage (Suzuki: concurrent usage) of said two or more pay-per-usage signals (Bennett: PPV).

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki is silent as to including indicia of multi-channel presentation of said two or more pay-per-usage signals. Chaney discloses including indicia of multi-channel presentation of said two or more pay-per-usage signals (having picture in picture for pay TV systems involves detecting if the viewer has proper authorization to receive multiple programs: abstract; column 2, line 32-column 3, line 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki by including indicia of multi-channel presentation of said two or more pay-per-usage signals as

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taught by Chaney in order to determine if the viewer has properly decrypted the multiple channels.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Wonfor (6,381,747).

Regarding claim 14, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki discloses the method according to claim 11, wherein said indicia of concurrent usage (Suzuki: concurrent usage) of said two or more (Wehmeyer: two or more) pay-per-usage signals (Bennett: IPPV) and having received one of said two or more pay-per-usage signals while viewing another of said two or more pay-per usage signal is being used (Bennett: viewing history shows inconsistency) .

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki is silent as to including indicia of recording of at least one of said two or more pay-per-usage signals.

Wonfor discloses including indicia of recording of one of said pay-per-usage signals (lower quality of recording if viewer is not authorized to record: column 11, line 54-column 12, line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki by including indicia of recording of at least one of said two or more pay-per-usage signals as taught by Wonfor in order to lower the quality of a recording that a viewer is not permitted to record.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Chaney in further view of Alexander (6,177,931).

Regarding claim 16, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Chaney discloses the method according to claim 15, wherein said indicia of multi-channel presentation include presentation of said two or more pay-per-usage signals (Chaney: pay TV with PIP: abstract; column 2, line 32-column 3, line 16)

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Chaney is silent as to the PIP in an electronic program guide. Alexander discloses the PIP in an electronic program guide (EPG with PIP displaying last tuned channel or displaying future channel that is highlighted: column 3, line 1-column 4, line 27; Figures 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Chaney by having a PIP in an electronic program guide as taught by Alexander in order to view the last tuned channel or a future channel that is highlighted in the program guide.

Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks.

Regarding claim 18, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki discloses the method according to claim 17, wherein at least one

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of the said steps of acquiring at least two signal usage records (Wehmeyer: two usage records), evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver (Sprunk: evaluating, detecting, disabling: paragraphs [0099-0118; Figures 15-16).

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki is silent about being performed at a different time than in immediate succession to each other of the said steps. Hendricks discloses performed at a different time than in immediate succession to each other of the said steps (the system polls the receiver and the receiver sends monthly reports as to what the viewer watched, rather than sending a report up in immediate succession after watching a program and having the report evaluated on a monthly basis, instead of evaluating in immediate succession after viewing the program: paragraphs [0017, 0121]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki by being performed at a different time than in immediate succession to each other of the said steps as taught by Hendricks in order to save upstream bandwidth by transmitting information upstream monthly as opposed to more often.

Regarding claim 22, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks discloses the method according to claim 18, wherein said receiver is associated with an interactive television system (Wehmeyer: users interacting with user interface to tune to programs: column 5, lines 7-30; Figures 6A-6C).

Claims 19-21, 31-32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek.

Regarding claim 19, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks discloses the method according to claim 18, wherein said steps of acquiring at least two signal usage records (Wehmeyer: two signals), evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver (Sprunk: paragraphs [0099-0118]).

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks is silent as to disabling said receiver is performed by said receiver. Bednarek discloses disabling said receiver is performed by said receiver (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks by disabling said receiver is performed by said receiver as taught by Bednarek in order to have an authorization mechanism built into the receiver in case the headend fails to notice the viewer is not properly authorized.

Regarding claim 20, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks is silent as to the method according to claim 18, wherein said content delivery network includes a conditional access system in

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communication with said receiver, and said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting said unauthorized signal usage and disabling said receiver are performed by said conditional access system.

Bednarek discloses the method according to claim 18, wherein said content delivery network includes a conditional access system in communication with said receiver, and said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting said unauthorized signal usage and disabling said receiver are performed by said conditional access system (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks by including a conditional access system in communication with said receiver, and said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting said unauthorized signal usage and disabling said receiver are performed by said conditional access system as taught by Bednarek in order to have an authorization mechanism built into the receiver in case the headend fails to notice the viewer is not properly authorized.

Regarding claim 21, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks discloses the method according to



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claim 18, wherein said content delivery network in communication with said receiver, and said receiver performs at least one of said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver (Sprunk: paragraphs [0099-0118]; Figures 15-16).

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks is silent as to a conditional access system in communication, the conditional access system performs a said step other than the said at least one of said steps.

Bednarek discloses a conditional access system in communication, the conditional access system performs a said step other than the said at least one of said steps (conditional accesser performs the extra set of taking a GPS location of the region and determining the content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks by having a conditional access system in communication, the conditional access system performs a said step other than the said at least one of said steps as taught by Bednarek in order to determine the regional content that a viewer is entitled to receive.

Regarding claim 31, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek discloses

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the method according to claim 20, wherein said steps of acquiring a geographic indicia (Bednarek: receiver with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), acquiring at least one record, evaluating said at least one usage record, detecting unauthorized signal usage and disabling said receiver are performed by said receiver.

Regarding claim 32, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek discloses the method according to claim 20, wherein said content delivery network includes a conditional access system in communication with said receiver, and said steps of acquiring a geographic indicia (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), acquiring at least one record (Sprunk: paragraphs [0099-0118]; Figures 15-16), evaluating said at least one usage record (Sprunk: paragraphs [0099-0118]; Figures 15-16), detecting unauthorized signal usage and disabling (Sprunk: paragraphs [0099-0118]; Figures 15-16) said receiver are performed by said conditional access system (Bednarek: conditional access system in receiver permits viewing of regional content only: column 5, lines 25-65; column 6, lines 50-55).

Regarding claim 34, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek discloses the method according to claim 20, wherein said receiver is associated with an

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interactive television system (Wehmeyer: users interacting with user interface to tune to programs: column 5, lines 7-30; Figures 6A-6C).

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Bednarek.

Regarding claim 23, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki is silent as to the method according to claim 11, wherein the said step of evaluating said at least two signal usage records and detecting unauthorized signal usage are performed by at least one of said receiver, an advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network.

Bednarek discloses the method according to claim 11, wherein the said step of evaluating said at least two signal usage records and detecting unauthorized signal usage are performed by at least one of said receiver, an advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki by being performed by at least one of said receiver, an advertising management

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system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network as taught by Bednarek in order to determine the regional content that a viewer is entitled to receive.

Claims 24, 27, 29, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Bednarek.

Regarding claim 24, Sprunk discloses a method for controlling unauthorized signal usage in a content delivery network (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract), the method comprising; acquiring at least one signal usage record for said receiver (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract); evaluating said at least one signal usage record for indicia of usage of at least one signal not normally authorized on said receiver (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract); and detecting unauthorized signal usage upon

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said at least one signal usage record having indicia of usage of a signal not normally authorized for usage (security checks performed by the set top box are reported back to the headend and security reports about objects such as when video is displayed is reported back to the headend and if security report is not sent back, this could indicate a hacked set top box: paragraphs [0032, 0035, 0042, 0048, 0099-0118]; Figures 15A-15C; 16A-16C; abstract).

Sprunk is silent as to the method comprising the steps of acquiring geographic indicia for a receiver of said content, said geographic indicia identifying a geographic location associated with said receiver; and not normally authorized for usage in the said geographic location.

Bednarek discloses the method comprising the steps of acquiring geographic indicia for a receiver of said content (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), said geographic indicia identifying a geographic location associated with said receiver (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2); and not normally authorized for usage in the said geographic location (set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have

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been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk by acquiring geographic indicia for a receiver of said content, said geographic indicia identifying a geographic location associated with said receiver; and not normally authorized for usage in the said geographic location as taught by Bednarek in order to determine if the content should be blacked out.

Regarding claim 27, Sprunk in view of Bednarek discloses the method according to claim 24, wherein said geographic indicia comprise data associated with a global positioning system (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2).

Regarding claim 29, Sprunk in view of Bednarek discloses the method according to claim 24, further comprising disabling said receiver in said content delivery network upon detecting unauthorized signal usage at said receiver (Sprunk: paragraphs [0101-0102]).

Regarding claim 35, Sprunk in view of Bednarek discloses the method according to claim 24, wherein the said step of evaluating said at least one usage record is performed by at least one of said receiver (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), an advertising management system, a blackout control subsystem, a conditional access system (Bednarek: set top box with GPS and

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conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), a multiplexer, and a parental control system, in each case being connected to said content delivery network (Bednarek: the set top box is part of the network).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Bednarek in further view of Williams.

Regarding claim 25, although Sprunk in view of Bednarek discloses geographic blackout regions (Bednarek: blacking out programming for receivers within a certain regional area: column 3, lines 57-65), Sprunk in view of Bednarek is silent as to the method according to claim 24, wherein said indicia of usage of said at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic region which does not normally permit usage of the signal in the geographic location of said receiver.

Williams discloses the method according to claim 24, wherein said indicia of usage of said at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic region which does not normally permit usage of the signal in the geographic location of said receiver (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Bednarek by having the indicia of usage of said

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at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic blackout region which does not normally permit usage of the signal in the geographic location of said receiver as taught by Williams in order to detect the presence of any hackers.

Claims 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Bednarek in further view of Zhou (2003/0097657).

Regarding claims 26 and 28, although Sprunk in view of Bednarek discloses geographic location (Bednarek: GPS locator in set top box), Sprunk in view of Bednarek is silent as to the method according to claim 24, wherein said geographic indicia comprise data associated with the time zone and postal code of the said geographic location.

Zhou discloses the method according to claim 24, wherein said geographic indicia comprise data associated with the time zone and postal code of the said geographic location (geographic location includes zip codes and time zones: paragraph [0098]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Bednarek to have geographic indicia comprise data associated with the time zone and postal code of the said geographic location as taught by Zhou in order to have additional criteria to categorize the location of the viewer.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Bednarek in further view of Hendricks.



Regarding claim 30, Sprunk in view of Bednarek discloses the method according to claim 29, wherein at least one of said steps of acquiring a geographic indicia (Bednarek), acquiring at least one usage signal (Sprunk: usage signal), evaluating said at least one usage record, detecting unauthorized signal usage and disabling said receiver is performed (Sprunk: disabling).

Sprunk in view of Bednarek is silent as to at a different time than in immediate succession to each other of the said steps.

Hendricks discloses at a different time than in immediate succession to each other of the said steps (the system polls the receiver and the receiver sends monthly reports as to what the viewer watched, rather than sending a report up in immediate succession after watching a program and having the report evaluated on a monthly basis, instead of evaluating in immediate succession after viewing the program: paragraphs [0017, 0121]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Bednarek by having different timing than in immediate succession to each other of the said steps as taught by Hendricks in order to save upstream bandwidth by sending information monthly, rather than all the time.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek in further view of Fries (2004/0055010).

Regarding claim 33, Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek discloses

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the method according to claim 20, wherein said content delivery network includes a conditional access system in communication with said receiver, and said receiver performs at least one of said steps of acquiring a geographic indicia (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2), acquiring at least one record, evaluating said at least one usage record, detecting unauthorized signal usage and disabling said receiver (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2).

Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek is silent as to the conditional access system performs a said step other than the said at least one of said steps.

Fries discloses the conditional access system performs a said step other than the said at least one of said steps (conditional access module provides additional step other than previous steps of parental control: paragraph [0101]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bennett in further view of Suzuki in further view of Hendricks in further view of Bednarek by having the conditional access system performs a said step other than the said at least one of said steps as taught by

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Fries in order to provide the parent with the capability of restricting what their children may watch.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Bednarek in further view of Bennett in further view of Suzuki in further view of Williams.

Regarding claim 36, Sprunk in view of Wehmeyer discloses two signals (Wehmeyer: two signals), but is silent as to the method of claim 1, further comprising acquiring a geographic indicia for said receiver to identify a geographic location associated with the receiver.

Bednarek discloses the method of claim 1, further comprising acquiring a geographic indicia for said receiver to identify a geographic location associated with the receiver (Bednarek: set top box with GPS and conditional accesser identifies the region of content that the viewer should receive, the GPS in combination with conditional accesser disables the set top box: column 5, lines 25-65; column 6, lines 50-55; Figure 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer by acquiring a geographic indicia for said receiver to identify a geographic location associated with the receiver as taught by Bednarek in order to determine the proper regional content that a viewer should receive.

Sprunk in view of Wehmeyer in further view of Bednarek is silent as to pay-per-usage signals.

Bennett discloses examining pay-per-usage signals (checking the viewing history for inconsistencies involved in authentication of the PPV: column 11, lines 11-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bednarek by examining pay-per-usage signals as taught by Bennett in order to determine if a pay TV viewer has proper authentication for viewing programs.

Sprunk in view of Wehmeyer in further view of Bednarek in further view of Bennett is silent as to the history being concurrent usage of pay-per-usage signals.

Suzuki discloses concurrent usage (continuously pressing the channel change button tunes to two or more channels to quickly tune to channels: paragraphs [0028-0034]; Figure 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bednarek in further view of Bennett by concurrently using as taught by Suzuki in order to quickly surf through channels.

Sprunk in view of Wehmeyer in further view of Bednarek in further view of Bennett in further view of Suzuki is silent as to each of which is only normally authorized for use in mutually distinct geographic locations; use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver.

Williams discloses each of which is only normally authorized for use in mutually distinct geographic locations (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract); use at said receiver of a signal not normally authorized for

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usage in the geographic location associated with said receiver (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bednarek in further view of Bennett in further view of Suzuki by having each of which is only normally authorized for use in mutually distinct geographic locations; use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver as taught by Williams in order to identify any potential hackers trying to access content for multiple regions.

Claim 42 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams.

Regarding claim 42, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek is silent as to the system for controlling unauthorized signal usage of claim 41, wherein said indicia include use at said receiver of at least two signals each of which is only normally authorized for use in mutually distinct geographic locations.

Williams discloses the system for controlling unauthorized signal usage of claim 41, wherein said indicia include use at said receiver of at least two signals each of which is only normally authorized for use in mutually distinct geographic locations (cable modem with MAC address that is valid for only one region is being used for multiple

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regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek by having said indicia include use at said receiver of at least two signals each of which is only normally authorized for use in mutually distinct geographic locations as taught by Williams in order to prevent hackers from accessing multiple regions of programming that they are not authorized to receive.

Regarding claim 51, although Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek discloses geographic blackout region (Bednarek: blacking out programming for receivers within a certain regional area: column 3, lines 57-65), Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek is silent as to the system for controlling unauthorized signal usage of claim 50, wherein said indicia of usage of said at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic region which does not normally permit usage of the signal in the geographic location of said receiver.

Williams discloses the system for controlling unauthorized signal usage of claim 50, wherein said indicia of usage of said at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic region which does not normally permit usage of the signal in the geographic location of said receiver (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-

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0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek by having said indicia of usage of said at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic region which does not normally permit usage of the signal in the geographic location of said receiver as taught by Williams in order to prohibit hackers from accessing content across multiple networks that they are not authorized to receive.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams in further view of Tsuria.

Regarding claim 43, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams discloses the system for controlling unauthorized signal usage of claim 42, wherein usage of each said at least two signals (Wehmeyer: two signal usages).

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams is silent as to associated with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any one of said at least two signals by reference to its respective blackout region is distinct from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals.

Tsuria discloses is associated with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any one of said at least two signals by reference to its respective blackout region is distinct from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals (blackout receivers within the blackout region and permitting viewers outside the region to watch the programming: page 8, line 17-page 9, line 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams by being associated with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any one of said at least two signals by reference to its respective blackout region is distinct from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals as taught by Tsuria in order to blackout content for a live sporting event if a viewer lives within a certain region.

Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki.

Regarding claim 44, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek discloses usage of two or more signals (Wehmeyer: two



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signals), but is silent as to the system for controlling unauthorized signal usage of claim 41, wherein said indicia include concurrent usage of pay-per-usage signals.

Bennett discloses the system for controlling unauthorized signal usage of claim 41, wherein said indicia include usage of pay-per-usage signals (the viewing history checks for inconsistencies involved in authentication of the PPV: column 11, lines 11-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek by controlling unauthorized signal usage, wherein said indicia includes usage of pay-per-usage signals as taught by Bennett in order to check for any inconsistencies in PPV authentication.

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett is silent as to concurrent usage.

Suzuki discloses concurrent usage (continuously pressing the channel change button tunes to two or more channels to quickly tune to channels: paragraphs [0028-0034]; Figure 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett by concurrent usage as taught by Suzuki in order to quickly surf through channels.

Regarding claim 45, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki discloses the system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent (Suzuki: concurrent) usage of two or more (Wehmeyer: two or more) pay-

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per-use signals (Bennett: IPPV) include indicia of usage of said two or more pay-per-usage signals within a predetermined period of time (continuously pressing the channel change button tunes to two or more channels to quickly tune to channels: paragraphs [0028-0034]; Figure 4).

Claims 46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki in further view of Chaney.

Regarding claim 46, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki discloses the system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent usage of said two (Wehmeyer: two or more) or more pay-per-usage signals (Bennett: IPPV).

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki is silent as to indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals.

Chaney discloses indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals (having picture in picture for pay TV systems involves detecting if the viewer has proper authorization to receive multiple programs: abstract; column 2, line 32-column 3, line 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki by including indicia of picture-in-picture

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presentation of at least two of said two or more pay-per-usage signals as taught by Chaney in order to determine if the viewer has proper authorizations to receive multiple pay TV signals.

Regarding claim 48, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki discloses the system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent usage of said two or more (Wehmeyer: two or more) pay-per-usage signals (Bennett: IPPV).

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki is silent as to include indicia of multi-channel presentation of said two or more pay-per-usage signals.

Chaney discloses include indicia of multi-channel presentation of said two or more pay-per-usage signals (having picture in picture for pay TV systems involves detecting if the viewer has proper authorization to receive multiple programs: abstract; column 2, line 32-column 3, line 16). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki by including indicia of multi-channel presentation of said two or more pay-per-usage signals as taught by Chaney in order to determine if the viewer has proper authentication to view multiple pay TV signals.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki in further view of Wonfor.

Regarding claim 47, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki discloses the system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent (Suzuki: concurrent) usage of said two or more (Wehmeyer: two or more) pay-per-usage signals (Bennett: IPPV) include indicia of another of said two or more pay-per-usage signal is being used (Bennett: viewing history shows inconsistency).

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki is silent as to include indicia of recording of at least one of said two or more pay-per-usage signals.

Wonfor discloses include indicia of recording of at least one of said two or more pay-per-usage signals (lower quality of recording if viewer is not authorized to record: column 11, line 54-column 12, line 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Bednarek in further view of Bennett in further view of Suzuki by including indicia of recording of at least one of said two or more pay-per-usage signals as taught by Wonfor in order to lower the quality of a recording that a viewer is not permitted to record.

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki in further view of Alexander.

Regarding claim 49, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki discloses the system for controlling unauthorized signal usage of claim 44, wherein said indicia of multi-channel presentation include presentation of said two or more (Wehmeyer: two or more) pay-per-usage (Bennett: IPPV) signals.

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki is silent as to picture in picture in an electronic program guide.

Alexander discloses in an electronic program guide (EPG with PIP displaying last tuned channel or displaying future channel that is highlighted: column 3, line 1-column 4, line 27; Figures 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Bennett in further view of Suzuki by having picture in picture in an electronic program guide as taught by Alexander in order to present a program that was tuned to in the past or a program to be tuned to in the future.

Claims 52 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Zhou.

Regarding claims 52 and 54, although Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek discloses geographic location (Bednarek: GPS locator in set top box), Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek is silent as to the system for controlling unauthorized signal usage of claim 50, wherein said geographic indicia comprise data associated with the time zone or postal code of the said geographic location.

Zhou discloses the system for controlling unauthorized signal usage of claim 50, wherein said geographic indicia comprise data associated with the time zone or postal code of the said geographic location (geographic location includes zip codes and time zones: paragraph [0098]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek to have geographic indicia comprise data associated with the time zone and postal code of the said geographic location as taught by Zhou in order to have additional criteria to categorize the location of the viewer.

Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams.

Regarding claim 55, Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek discloses the system for controlling unauthorized signal usage of claim 41, wherein said acquisition module further acquires a geographic indicia associated with said receiver (Bednarek: GPS locator within the set topbox), and said

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indicia include at least two of: use at said receiver of at least two signals (Wehmeyer: two signals).

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek is silent as to each of which is only normally authorized for use in mutually distinct geographic locations; use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver; and concurrent usage of two or more pay-per-usage signals.

Williams discloses each of which is only normally authorized for use in mutually distinct geographic locations (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract); use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver (cable modem with MAC address that is valid for only one region is being used for multiple regions may indicate a hacker: paragraphs [0029-0034]; Figure 3; abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek by each of which is only normally authorized for use in mutually distinct geographic locations; use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver as taught by Williams in order to prohibit hackers from accessing content across multiple regions that they are not permitted to receive.

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Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams is silent as to using pay-per-usage signals.

Bennett discloses usage of pay-per usage signals (the viewing history checks for inconsistencies involved in authentication of the PPV: column 11, lines 11-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams by having the indicia include indicial of usage of pay-per-usage signals as taught by Bennett in order to detect any unauthorized use of pay-per-view channels.

Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams in further view of Bennett is silent as to concurrent usage. Suzuki discloses concurrent usage (continuously pressing the channel change button tunes to two or more channels to quickly tune to channels: paragraphs [0028-0034]; Figure 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sprunk in view of Wehmeyer in further view of Hendricks in further view of Bednarek in further view of Williams in further view of Bennett by concurrent usage as taught by Suzuki in order to quickly surf through channels.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



US Patent Application Publication # 2004/0194124 to Medvinsky discloses checking for authenticity or authorization of a set top box within a network (abstract; Figure 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON CHUNG whose telephone number is (571)272-3845. The examiner can normally be reached on 9:00-5:30 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Y. Koenig can be reached on (571)272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJC

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